

**CONFIDENTIAL**

**~~SECRET~~**

26 May 1959

(IN TRIPLICATE)

25X1

25X1

25X1

Attention: Mr. [REDACTED]

Subject: Progress Reports, Submission of

Enclosure: (A) Progress Reports for the Month of  
April 1959, in quadruplicate

Gentlemen:

Pursuant to the terms and provisions of the applicable contract, the contractor submits Enclosure (A), described above, detailing the progress achieved during the month of April 1959.

In the event further information is desired concerning the enclosed reports, do not hesitate to contact the writer.

Very truly yours,

25X1

25X1

[REDACTED]  
Contract Administrator  
NKG:js

25X1

25X1

THIS DOCUMENT CONTAINS INFORMATION AFFECT-  
ING THE NATIONAL DEFENSE OF THE UNITED STATES  
WITHIN THE MEANING OF THE ESPIONAGE LAWS,  
TITLE 18, U.S.C., SECTIONS 793 AND 794. ITS  
TRANSMISSION OR REVELATION OF ITS CON-  
TENTS TO ANY PERSON OR BY ANY UNAUTHORIZED  
PERSON IS PROHIBITED BY LAW.

**CONFIDENTIAL**  
**CONFIDENTIAL**

**~~SECRET~~**

/ 1

PROGRESS REPORT  
FOR  
MONTH OF APRIL 1959

TRANSPORTABLE INFLATABLE ANTENNA

**Purpose:** The scope of this project is to design, develop and test one antenna system for the 350-10,000 mc range and to fabricate and deliver five complete antenna systems with indoor mounts and two interchangeable outdoor mounts.

**Personnel:** Electrical Engineer:  25X1  
Mechanical Engineers:

**Status:** One antenna system including an outside mount has been assembled and tested. The final electrical test which consisted of taking a full set of radiation patterns, measuring the gain of both the 6.5 and 2 foot antennas, and checking the input VSWR of both feeds in conjunction with their respective reflectors has been completed. Representative radiation patterns as well as curves of VSWR and gain as a function of frequency will be presented in the instruction book and final Engineering Report. Mechanical tests consisted of checking the contour of the reflectors, the erection procedure, and the stability of the system.

In a 35 mph wind, the antenna system appeared to be quite stable. The guy anchors in this case were driven into sodded black soil. It is felt that the system can easily withstand the required 70 mph wind if the anchors furnished are placed in the proper type soil.

SECRET

CONFIDENTIAL

Because of poor high frequency performance, the Andrew air dielectric coax (Heliac) mentioned in previous reports will not be used; 3/8 inch Prodelin Inc. semi-flexible coax will be furnished with the system instead.

Future Plans: The first complete antenna system will be shipped within the next few days. The five remaining systems will be ready to ship by the time the log periodic feeds which are being fabricated at present are finished. The delivery date will depend in part on customer approval of the first antenna system. The instruction book is being written and should be completed by no later than June 1.

CONFIDENTIAL